

**Table S3.** Cycloaddition of CO<sub>2</sub> and styrene oxide under neat (green) conditions

Entry	Photocatalyst <sup>[a]</sup>	Catalyst (mol%)	Yield% <sup>[b]</sup>	TON <sup>[c]</sup>	TOF (h <sup>-1</sup> ) <sup>[d]</sup>
1	MOF-901, <i>n</i> -Bu <sub>4</sub> NBr, light	0.005	99.9	64.4	2.7
2	MOF-997, <i>n</i> -Bu <sub>4</sub> NBr, light	--	99.9	--	--
3	MOF-997-O, <sup>n</sup> Bu <sub>4</sub> NBr, light	--	99.9	--	--
4	<i>n</i> -Bu <sub>4</sub> NBr, no catalyst, light	--	23	--	--
5	MOF-901 light	0.005	0	0	0
6	MOF-901, <i>n</i> -Bu <sub>4</sub> NBr, no light	0.005	0	0	0
7	MOF-901, no light	0.005	0	0	0
8	<i>n</i> -Bu <sub>4</sub> NBr, no catalyst, no light	--	0	0	0
9	MOF-901, <i>n</i> -Bu <sub>4</sub> NBr, no light, heat (353 K)	0.005	25	16	0.7
10	TiO <sub>2</sub> , <i>n</i> -Bu <sub>4</sub> NBr, light	--	50	--	--
11	TiO <sub>2</sub> , light	--	12	--	--
12	No <i>n</i> -Bu <sub>4</sub> NBr, no catalyst, light	--	0	--	--

<sup>a</sup>Reaction condition: styrene oxide (0.44 mmol), photocatalyst (10 mg), *n*-Bu<sub>4</sub>NBr (9 mg, 0.028 mmol), and 0.045 mmol carbon dioxide at 353 K and 24 h in 4 mL of acetonitrile/methanol (3:1 v:v);

<sup>b</sup>Conversion determined by <sup>1</sup>H NMR; <sup>c</sup>TON: turnover number = (mmol of product)/(mmol of catalyst);

<sup>d</sup>TOF: turnover frequency = (mmol of product)/(mmol of catalyst)(reaction time, hour); <sup>b</sup>Conversion determined by <sup>1</sup>H-NMR.